

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Work Order ID 156565***156565***

Page 2

Monday, January 30, 2017 2:11:57 PM

Item ID: D3704-3 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Escutcheon
Start Date: 2/3/2017 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 2/8/2017 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.01				<u>4</u>	<u>0</u>		<u>mf</u> 17/02/04
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.01		B. 17-02-07		<u>4</u>	<u>0</u>		DAS 08 9-09
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.03				<u>(X4)</u>	<u>0</u>		2017/02/03 BEB.

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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐			

Work Order ID 156565

Monday, January 30, 2017 2:11:57 PM

156565

Page 3

Item ID: D3704-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Escutcheon

Start Date: 2/3/2017

Start Qty: 4.00

4

Cust Item ID:

Required Date: 2/8/2017

Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC3- Inspect Part Finish

0.00

150

QC

Memo

0.01

Quality Control

DAS
38
9-89
FEB 08 2017

160

Identify as per dwg & Stock Location: Stasz

0.00

160

Packaging

Memo

0.01

Packaging

DAS
6
9-89
FEB 10 2017

170

QC21- Final Inspection - Work Order Release

0.00

170

QC

Memo

0.07

Quality Control

DAS
21
9-89
FEB 13 2017DAS
21
9-89

FEB 10 2017

DQA: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____						
Misidentified	☐	Past Due	☐							

Picklist Print

Monday, January 30, 2017 2:12:43 PM

Page 1 /

Work Order ID: 156565

156565

Parent Item: D3704-3

D3704-3

Parent Item Name: Escutcheon

Start Date: 2/3/2017

Required Date: 2/8/2017

Start Qty: 4.00

Required Qty: 4.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.500X01.25 0		Purchased	No				f	9.0900		1.04			

M6061T6B1 500X01 250

B.n 17-02-03

6061-T6 Bar 1.50 x 1.25

Location

Loc Qty

Loc Code

MAT003

9.09

→ m135987

9.09

1.100 ^{ft}

DQA: _____ Date: _____



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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER :									

DART AEROSPACE LTD		Work Order: 156565
Description: Escutcheon		Part Number: D3704-3
Inspection Dwg: D3704	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

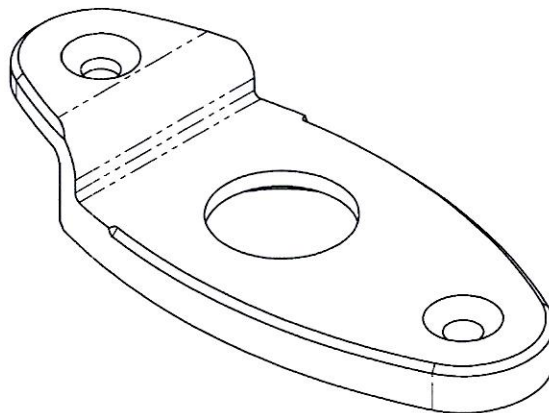
Drawing Dimension		Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.22	+/-0.030	1.219	—		Vern 916-06	
0.610	+/-0.010	.611	—		"	
Ø0.170	+0.005/-0.001	Ø.171	—		"	
Ø0.322 x 100°	+/-0.010 x +/-0.5°	Ø.328 x 100°	—		"	
1.063	+/-0.010	1.060	—		"	
2.125	+/-0.010	2.122	—		"	
0.866	+/-0.010	.866	—		"	
0.206	+/-0.010	.207	—		"	
Ø0.440	+0.005/-0.001	Ø.440	—		"	
R0.63	+/-0.030	R.063	—		R-G	
0.500	+/-0.010	.500	—		Vern 416-06	
0.125	+/-0.010	.127	—		"	
R0.06	+/-0.030	R.060	—		R-G	
0.625	+/-0.010	.625	—		Vern 416-06	
R0.156	+/-0.010	R.156	—		R-G	
R0.03	+/-0.030	R.030	—		Vern 416-06	
0.03 x 45°	+/-0.030 x +/-0.5°	.030 x 45°	—		"	
Ø0.755	0.005/-0.001	Ø.756	—		"	
0.175	+/-0.010	.180	—		"	
0.218	+/-0.010	.218	—		"	
0.435	+/-0.010	.435	—		"	
0.220	+/-0.010	.220	—		"	
0.06 x 45°	+/-0.030 x +/-0.5°	.060 x 45°	—		"	
Ø0.686	0.008/-0.001	Ø.686	—		"	
Ø0.630	0.008/-0.001	Ø.630	—		"	
0.725	+/-0.010	.673	—		"	
2.88	+/-0.030	2.878	—		"	

Measured by: JML	Audited by: DAS	Preliminary Approval:
Date: 07/02/04	Date: 17-02-07	Date:

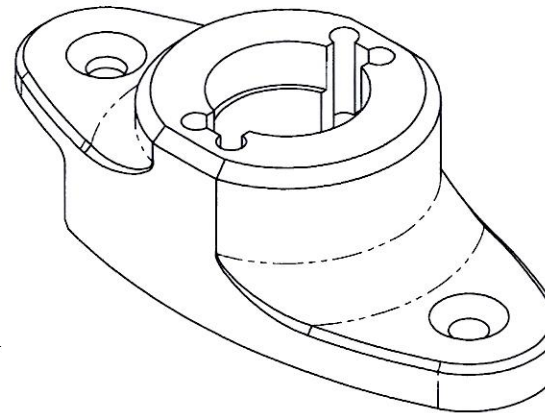
Rev	Date	Change	Revised by	Approved
A	10.02.02	New Issue	KJ	
B	13.02.27	Dimensions updated per Dwg Rev C	KJ	

0.850	+/-0.010	.851	—			
R0.19	+/-0.030	R.190	—			

JES 17/01/31



D3704-1 ESCUTCHEON



D3704-3 ESCUTCHEON

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 186565

JAN 30 2017

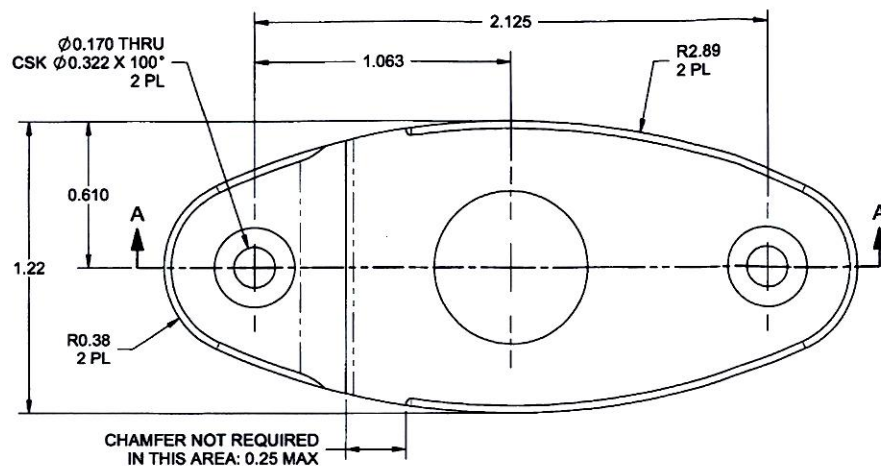
NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/-T6510/-T6511/-T62) BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3704-X" AND B/N PER DART QSI 044 6.1 (PERMANENT INK MARKER)
- 7) WEIGHT:
- D3704-1 = 0.04 lbs
- D3704-3 = 0.11 lbs

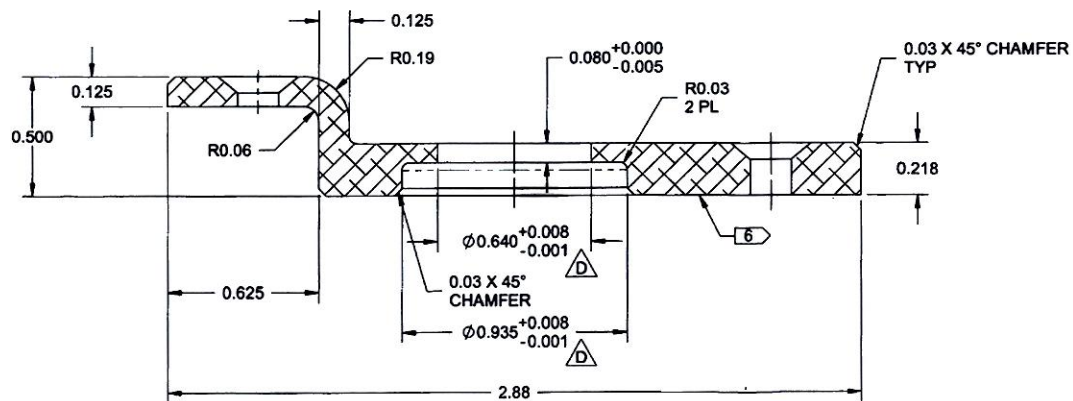
D	D3704-1: TOLERANCE CHANGE ZN A5-2 (WAS +0.005/-0.001). REVISED D3704-3. REF: NCR16-5827 AND CIR16-71.	AK	16.06.03
C	$\phi 0.630 \pm 0.005/-0.000$ WAS $\phi 0.628$ (ZN B5-3); 0.725 WAS 0.685 (ZN B5-4). REASON: PAR12-188/CIR12-4.	MB	12.09.05
B	ADDED D3704-3. REASON: COMPATIBILITY WITH AA'S HANDLE.	MB	09.03.17
A	NEW ISSUE	MB	08.02.05
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	MB	DRAWING NO.	REV. D
MFG. APPR.	JFS	D3704	SHEET 1 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	ESCUTCHEON	NTS
DATE	16.06.03	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

RELEASED
2016-06-24
EN 16-577

APPROVED



D3704-1 ESCUTCHEON



SECTION A-A

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MB	DRAWING NO.	REV. D
MFG. APPR.	JFS	D3704	SHEET 2 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	ESCUTCHEON	NTS
DATE	16.06.03	COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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2016-06-24

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